

In the Claims:

1. (Currently amended.) A method for preparing a mineral melt for the production of mineral fibres, ~~in particular rock wool~~ for the production of insulating materials for thermal, acoustical and fire protection, of stock culture substrates, reinforcement fibres and fibres for filtering purposes, in which method a mixture is prepared ~~at least comprising between~~ from 38 to 64 % 64% by weight of industrial residual materials with and 5 to 45 % 45% by weight of correction materials ~~for regulating the required composition and viscosity of the melt~~, said residual materials and said correction materials are reduced in size and compacted together with a bonding agent to form moulded pieces which are supplied to a melting unit, wherein the components of the moulded pieces, ~~particularly the correction materials and/or other components of the mixture~~ include 2 to 25 % 25% by weight of granular combustion residues and wherein the correction materials have a grain size of 0 to 20 mm.

2. (Currently amended.) The method according to claim 1, characterized in that said residual materials are selected from the group consisting of solidified melts, separated spherical or spiky glass particles and/or defective or recycled products, filter dusts, mechanical mixture residues residue and parts of a fire-resistant furnace lining.

3. (Previously presented.) The method according to claim 1, characterized in that said residual materials are reduced in size and mixed with the correction materials as well as the bonding agent.

4. (Previously presented.) The method according to claim 1, characterized in that said moulded pieces are fed to the melting unit together with extrusive rocks.

5. (Previously presented.) The method according to claim 1, characterized in that said combustion residues are produced by a fluidized-bed combustion.

6. (Currently amended.) The method according to claim 1, characterized in that said combustion residues ~~are of fine or extra fine~~ have a grain size less than or equal to 0.05 mm.

7. (Currently amended.) The method according to claim 1, characterized in that said combustion residues have the following composition:

SiO ₂	12 to 46% by weight
Al ₂ O ₃	8 to 20 % <u>20</u> % by weight
TiO ₂	0.2 to 2 <u>2</u> % by weight
Fe ₂ O ₃	1 to 41 % <u>11</u> % by weight
MgO	1 to 10 % <u>10</u> % by weight
CaO	8 to 31 % <u>31</u> % by weight
K ₂ O	1 to 3 % <u>3</u> % by weight
Na ₂ O	0.2 to 1.5% by weight
SO ₃	2 to 15% by weight
others	< 2 % <u>2</u> % by weight

8. (Previously presented.) The method according to claim 1, characterized in that said moulded pieces contain inorganic cement bonding agents.

9. (Currently amended.) The method according to claim 1, characterized in that said correction materials are substituted by combustion residues to an extent of 2 to ~~25~~% 25% by weight.

10. (Previously presented.) The method according to claim 1, characterized in that said correction materials are selected from the group consisting of granular materials, and residual materials from the power plant and/or metal producing and working industries.

11. (Cancelled.)

12. (Previously presented.) The method according to claim 1, characterized in that said correction materials include alkaline earth materials for viscosity reduction and/or Al_2O_3 for increasing the biosolubility.

13. (Currently amended.) The method according to claim 1, characterized in that said combustion residues contain components from a flue gas desulphurization.

14. (Previously presented.) The method according to claim 4, wherein the extrusive rocks are selected from the group consisting of basalt, diabase and furnace slags.

15. (Previously presented.) The method according to claim 6, wherein said combustion residues have a grain size less than or equal to 0.05 mm.

16. (Previously presented.) The method according to claim 1, wherein the granular combustion residues consist of ashes or slags from the combustion of lignite and/or coal dusts, paper sludge or wood chips.

17. (Previously presented.) The method according to claim 8, wherein the amount of inorganic bonding agents in said moulded pieces is between from 9 to 15 percent by weight.

18. (Previously presented.) The method according to claim 10, characterized in that said correction materials are haematite or magnetite.

19. (Currently amended.) The method according to claim 10, characterized in that said moulded pieces contain between from 20 to ~~50%~~ 50% by weight of said correction materials.

20. (Currently amended.) The method according to claim ~~1~~ 11, characterized in that said correction materials have a grain size between from 3 to 7 mm.